

Roadmap Development Workshop June 5-6, 2000

Agenda

Outcomes

- Refined vision statement
- Identified and ranked barriers:
 - Market technology and policy
- Key needs to address barriers

Day One

8:00

- Breakfast and Welcome!

9:00

- Review Vision Document

10:00

- Looking Ahead

10:45

B • r • e • a • k

11:00

- Review/identify Barriers to Vision

12:00

L • u • n • c • h

1:00

- Prioritize Barriers

1:45

- Breakfast and Welcome!

3:00

B • r • e • a • k

3:15

- Discuss Needs

4:15

- Discuss Needs within Specific Applications

5:15

- Recap & Adjourn

5:30

- Reception in Lobby

Day Two

8:00

- Breakfast

8:30

- Recap and Plan for the Day

8:45

- Shower Epiphanies

9:15

- Review Needs

10:15

B • r • e • a • k

10:30

- Organize Roadmapping Effort

12:00

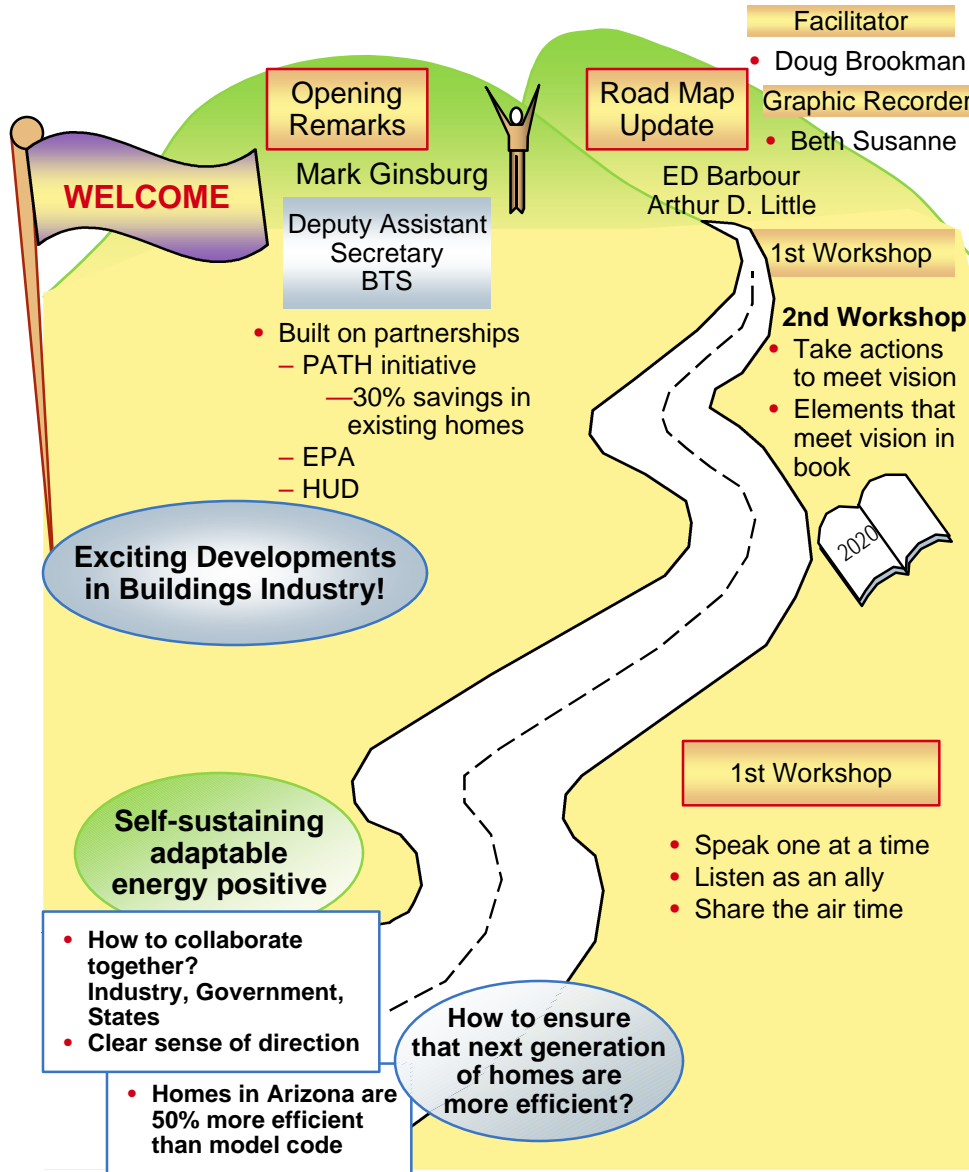
- Recap, Next Steps and Adjourn

12:45

L • u • n • c • h

June 5-6, 2000

Road Map Development Workshop



Review Vision Document

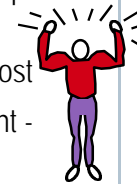
- Previous Roadmapping session - Fabulous!
- Need people working together
- Don't sell products sell systems
- Last 10 years - Drastic improvement
- Developed plan to work with path
- Brainstorming was good
- Developed vision from that brainstorming session
- Associations can bring some harmony (act as glue)

Tom Newton

Charles Cottrell

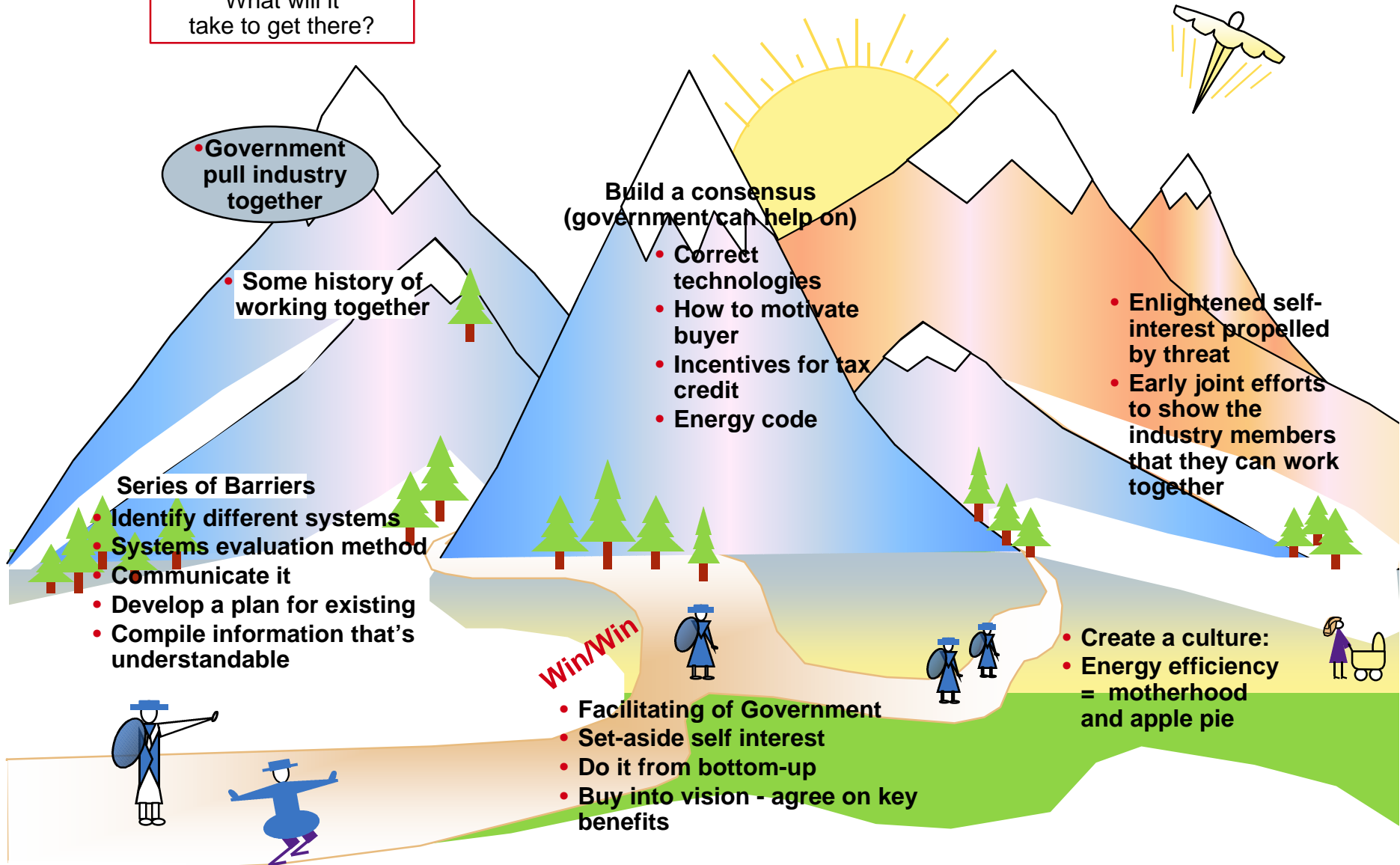
Vision

- Affordable, competitive, innovative, positive, adaptable to change
- Lifecycle cost vs. first cost
- Safe indoor environment - healthy
- Industry can create a consumer demand
- How to get there? → Form agreement on how to sell.
- Raise consumer awareness through economics or passion (green)
- May require continuing regulations
- Need to think of ways to excite consumer about energy efficient home.
- Create a carrot for consumer with tax credits
- Impact of building on overall environment
- Need push and pull strategies
- Vision should be clear envelope - Don't try to include too many ideas, short, crisp



Looking Ahead

What will it take to get there?



Vision Statement

Synonymous with Motherhood and Apple Pie

2020

Marketing can drive behavior

Consumers Purchasers All!

Homeowners-

Rehab? New?

"Drives" other than consumer pieces

Passive

Provide Leadership for

Economic or Passionate

Innovative/ Intelligent Building Technology

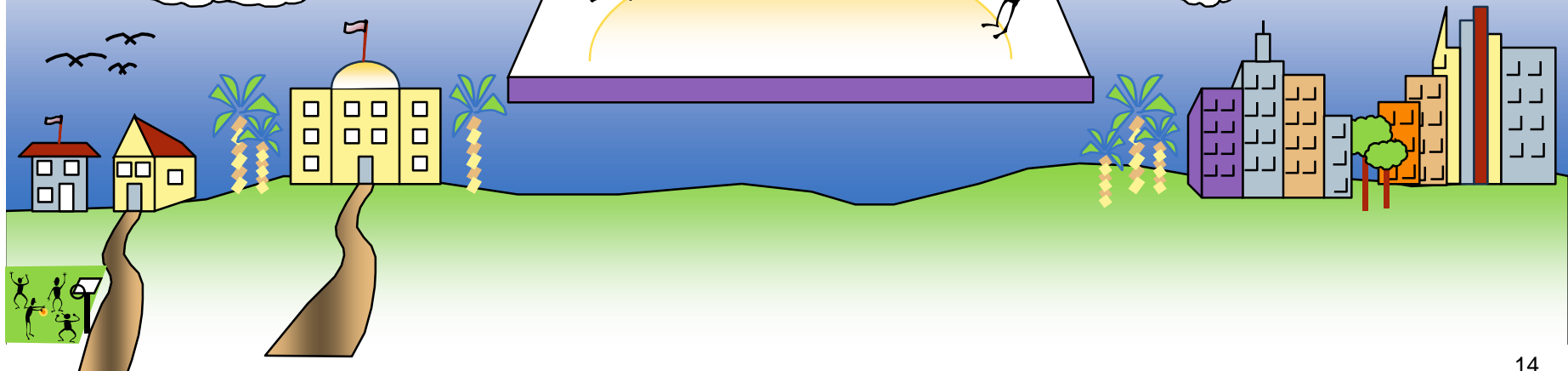
[Better access to] Highly consumers to drive public/private for self-sustaining, energy durable buildings that

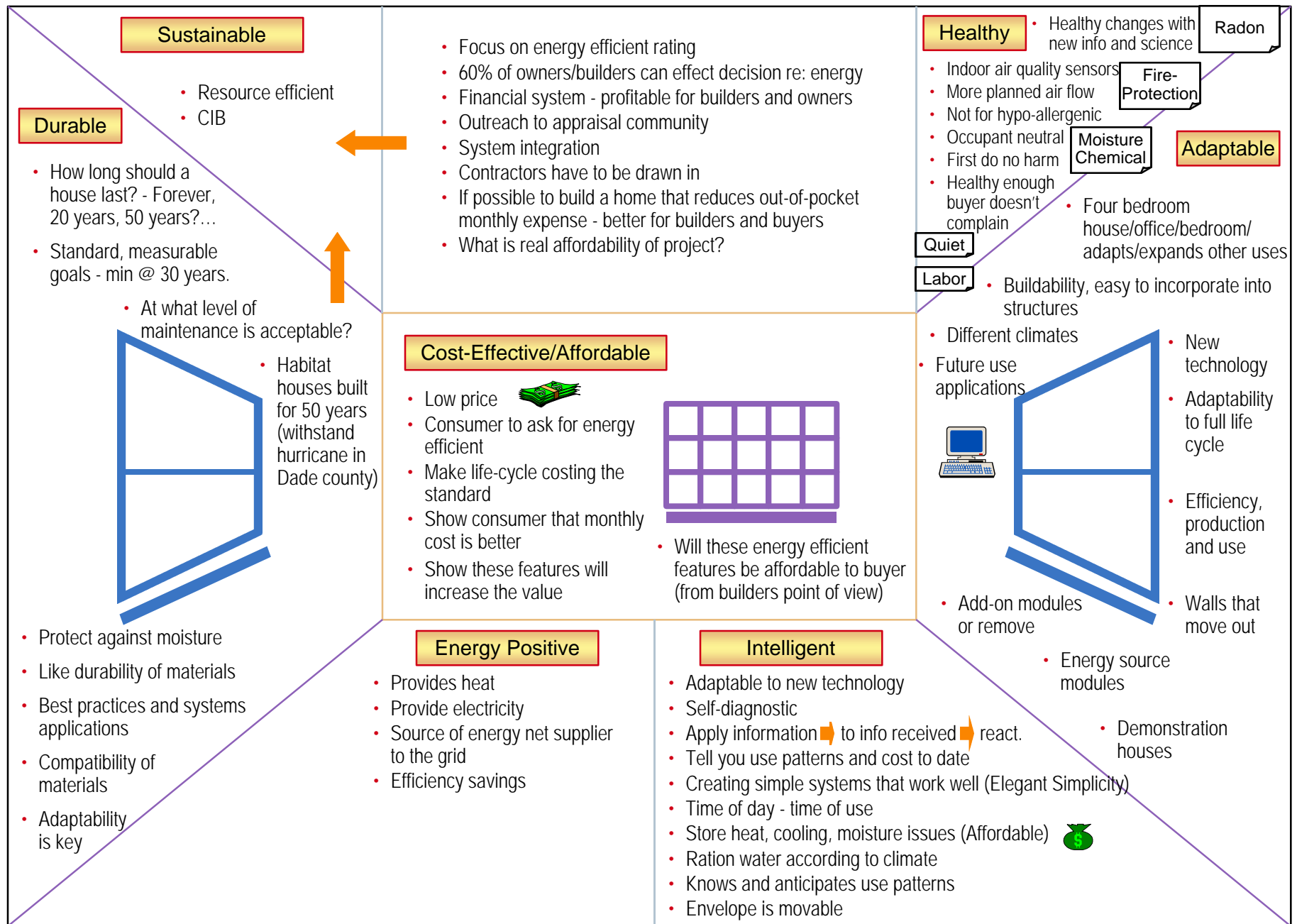
Healthy

Relevant information] enables partnership to meet demand positive, adaptable and are desirable places to work

Cost Effective

Affordable





Identify Barriers to Achieve the Vision

Policy

- (21) Lack of nationally accepted building rating system
- (17) Code acceptance, limitations, inconsistencies costs
- (15) Lack of insurance industry's support and involvement
- (4) Code enforcement; lack of inspection
- (4) Tax policy – R&D, Incentives
- (2) Codes need to be systems based as well as for occupational safety and health
- (2) Minimum standards perceived as high standards
- (2) HUD standards for manufactured housing are too low!
- (2) Lack of coordinated government research
- (2) Arbitrary funding for research (inadequate) and not aligned with need
- (1) Product liability limitations, ort reform
- (1) Distaste for regulation
- (1) Fragmented political institutions

Technology

- (12) Systems integration of building components & how they function
- (11) Lack of skilled labor - Subs (Improper installation) acceptance
- (8) Lack of collaborative R&D for systems
- (4) No process of discovery of interactive effects (new products)
- (2) Lawsuits/Product liability, new products
- (2) Technology inventions: recycling and separation
- (2) Testing technology performance of materials in the real world
- (2) Mass customization in an affordable way

Market

- (20) Lack of measurability: National standard?
- (19) Builder is the largest driver (push rather than pull) rather than the consumer
- (15) Highly fragmented industry, products, turf wars, building design, lack of leadership, builders – lack of industry vehicle, voice
- (9) Resistance to change (small entrepreneurs)
- (4) Products perception based on market image ® not performance
- (2) Vision Statement needs to be simplified in order to make it easier to market
- (2) Focus around median home values to target market (regionally related) 80/20 rule
- (2) Quality/quantity of labor
- (2) Both builder and consumer look at costs (initial)
- (1) Distrust of technology - will it work?, break?, be fixed locally?
- (1) Raising consumer awareness to real maintenance costs